

## Potential Federal Resources To Support Math Summit National Science Foundation Resources (NSF)

**Program: Informal Science Education Funding:** FY2003 = \$60.6 million

**Description:** The Informal Science Education Program (ISE) is part of NFF's Division of Elementary, Secondary, and Informal Education. It operates two grant competitions annually and the due dates for proposals in 2003 are May 30 and November 17 (NSF 03-511). The purpose of the ISE Program is to support projects designed to increase public interest in, understanding of, and engagement with science, technology, engineering, and mathematics (STEM).

**How it can work:** ISE activities provide rich and stimulating opportunities outside formal school settings where individuals of all ages, interests, and backgrounds increase their appreciation and understanding of science, technology, engineering and mathematics (STEM) education.

Summit Objective: Increasing Public Understanding

URL: http://www.nsf.gov

**Program: Teacher Professional Continuum (TPC)** 

Funding: FY2003 = \$56 million

**Description:** The purpose of the TPC Program is to: 1) Improve the quality and coherence of the learning experiences that prepare and enhance STEM (science, technology, engineering, and mathematics) teachers and school districts administrators; 2) Research and develop models and systems that support the teacher professional continuum; 3) Research teacher learning and its impact on teaching practice; and 4) Disseminate the research and innovative models and resources to a national audience. Proposals are due September 10, 2003.

**How it can work:** The TPC Program addresses critical issues and needs regarding the recruitment, preparation, enhancement, and retention of science, technology and mathematics teachers (NSF 03-534).

**Summit Objective:** Improving Teacher Knowledge

URL: http://www.nsf.gov

Program: Math and Science Partnership (MSP) Program

**Funding:** FY2003 = \$125 million

**Description:** This partnership is a collaboration between higher education disciplinary faculty. These projects will ensure that K-12 teachers engage in activities to develop strong mathematics/science content knowledge and related pedagogical skills. MSP, through projects funded through the Research Evaluation, and Technical Assistance (RETA) solicitation, encourages research and evaluation on MSP key features, such as teacher quality, quantity, and diversity. A second cohort of MSP Partnerships will be awarded in summer of 2003. Full proposals for MSP-RETA are due in mid-May 2003, with awards to be made prior to the end of September 2003. A new announcement/solicitation for a third component of the MSP program, the MSP Teacher Institutes for the 21st Century, is anticipated by late summer of 2003, with awards expected in winter 2004.

**How it can work:** The MSP Program supports innovative partnership-driven projects to improve K-12 student achievement in mathematics and science (NSF 02-190). Activities can support increasing the diversity of the teacher workforce, recruiting qualified individuals, influencing teacher certification, teacher induction, and increasing retention.

Summit Objective: Improving Teacher Knowledge

URL: http://www.nsf.gov

(NSF Continued)

**Program: Research on Learning and Education (ROLE)** 

**Funding:** FY2003 = \$40 million

**Description:** These projects advance the knowledge base about learning science and mathematics and contribute to the theoretical and evidentiary foundation for the programs that the NSF Directorate for Education and Human Resources (EHR) offers. Proposals for ROLE are due June 1 and December 15.

**How it can work:** The Research on Learning and Education (ROLE) Program (NSF 03-542) supports research across a continuum that includes the neuroscientific basis of human learning; cognitive science; science and mathematics learning in formal and informal educational settings; and changing educational systems to improve science and mathematics.

Summit Objective: Building the Research Base

URL: <a href="http://www.nsf.gov">http://www.nsf.gov</a>

**Program: The Interagency Education Research Initiative (IERI)** 

**Funding:** FY2003 = \$25 million for NSF share; \$48 million total

**Description:** The Interagency Education Research Initiative (IERI) is a joint effort of the Institute for Education Sciences, the National Science Foundation and the National Institute for Child Health and Development (NICHD).

**How it can work:** IERI supports research that investigates the effectiveness of educational interventions in reading, mathematics, and the sciences as they are implemented in varied school settings with diverse student populations; in particular, IERI projects focus on the process of scaling-up the implementation of education interventions that have already garnered significant evidence of effectiveness in multiple settings.

**Summit Objective:** Building the Research Base

URL: http://www.nsf.gov

**Program: Centers for Teaching and Learning** 

**Funding:** FY2003 = \$26 million

**Description:** The Centers for Teaching and Learning Program (CLT) supports Centers for five years that focus on important issues in K-12 education and faculty development in higher education. Each CLT identifies a critical issue around which to work, and all Center components address that issue. One competition will be held in 2003 (full proposals are due April 24 with required preliminary proposals) and another will be held in 2004 (NSF 02-038).

**How it can work:** The CLTs are partnerships between institutions of higher education and practitioners and address three goals: (1) enhancing the infrastructure of expertise around the key issue to be addressed through graduate programs and post-doctoral opportunities; (2) an applied research agenda around that issue; and (3) programs that address practitioner needs.

Summit Objective: Research and Improving Teacher Knowledge

URL: http://www.nsf.gov